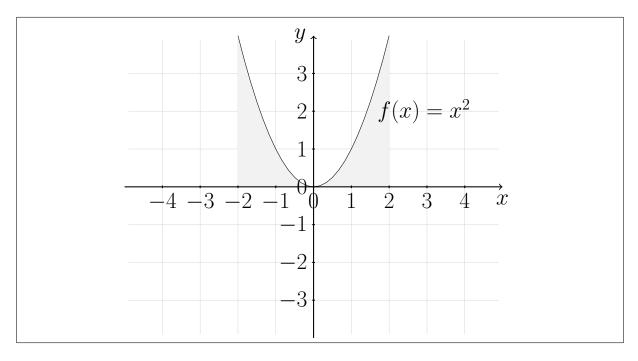
Cartesian Coordinate System.

```
\begin{tikzpicture}
     \draw[very thin, gray!30, step=1 cm](-4.9, -3.9) grid
2
        (4.9,3.9);
     \fill [gray!10, domain=-2:2, variable=\x]
3
      (-2, 0) -- plot (\{\x\}, \{\x*\x\}) -- (2, 0) -- cycle;
4
     \draw [thick] [->] (-5,0)--(5,0) node[right, below] {$x
5
        $};
      \foreach \x in \{-4, \ldots, 4\}
6
        \draw[xshift=\x cm, thick]
7
        (0pt,-1pt)--(0pt,1pt) node[below] {$\x$};
8
       \draw [thick] [->] (0,-4)--(0,4) node[above, left] {$y}
9
          $};
      \foreach \y in \{-3, \ldots, 3\}
10
        \draw[yshift=\y cm, thick] (-1pt,0pt)--(1pt,0pt) node
11
           [left] {$\y$};
12
     \draw [domain=-2:2, variable=\x]
13
       plot (\{\x\}, \{\x*\x\}) node[right] at (1.5,2) \{\f(x)=x
14
          ^2$}:
   \end{tikzpicture}
15
```



red circle

```
1
2 \begin{tikzpicture}
3     \draw[fill=red] (0,0) circle (1);
4 \end{tikzpicture}
```

red circle

```
1
2 \begin{tikzpicture}
3      \draw[fill=red] (0,0) circle (1);
4 \end{tikzpicture}
```